

ABSTRACT

Sub A7

- 5 ~~A method and apparatus is described for signalling the surface operator about downhole conditions. Sensors located downhole collect data while drilling and the data is processed to determine bit failure, for example. When the sensor data indicates a failure, the pressure of drilling mud is varied using a valve on the downhole unit, and this pressure variance is indicated by a pressure gauge visible to the operator. This pressure change tells the operator a failure has been indicated.~~

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